

WHAT IS CLAIMED IS:

- 1 1. A method comprising the steps of:
 2 sending a first encrypted routine of a software driver to a peripheral device, wherein the
 3 software driver is to interface with the peripheral device;
 4 decrypting, at the peripheral device, the first encrypted routine to generate a plaintext
 5 routine; and
 6 providing the plaintext routine to the software driver.
- 1 2. The method of Claim 1, wherein the first encrypted routine is an encrypted version of an
 2 encryption routine.
- 1 3. The method of Claim 1, wherein the first encrypted routine is an encrypted version of a
 2 decryption routine.
- 1 4. The method of Claim 1, wherein the peripheral device is a graphics chip.
- 1 5. The method of Claim 4, wherein the step of decrypting is performed by a 3D pipe of the
 2 graphics chip.
- 1 6. The method of Claim 5, wherein the step of decrypting is performed by a IDCT
 2 component of the graphics chip.
- 1 7. The method of Claim 5, wherein the step of decrypting is performed by dedicated
 2 encryption hardware of the graphics chip.

- 1 8. The method of Claim 1, further including the step of sending a decryption code to the
2 peripheral device, where the decryption code is to be used by the peripheral device to
3 decrypt the first encrypted routine.
- 1 9. The method of Claim 1, further including the step of removing the plaintext routine.
- 1 10. The method of Claim 1, further including the steps of:
2 encrypting, at the peripheral device, the plaintext routine to generate a second encrypted
3 routine, where the second encrypted routine is a version of the first encrypted
4 routine; and
providing the second encrypted routine to the software driver.
11. The method of Claim 10, further including the step of sending a encryption code to the
peripheral device, where the encryption code is to be used by the peripheral device to
encrypt the plaintext routine.
12. The method of Claim 10, wherein the second encrypted routine is a modified version of
the first encrypted routine.
- 1 13. The method of Claim 1, further including the step of selecting the first encrypted routine
2 from a plurality of different encrypted routines, wherein the plurality of different
3 encrypted routines are functionally equivalent.
- 1 14. The method of Claim 1, wherein the step of decrypting includes using a map as a
2 decryption key.
- 1 15. The method of Claim 14, wherein the map includes a texture map.

- 1 16. The method of Claim 1, wherein the step of providing includes storing the plaintext
2 routine in a location in memory accessible by the software driver, and where the location
3 in memory is known to the software driver.

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1 17. A method comprising:
 2 sending a first encrypted routine of a software driver to a graphics chip, wherein the
 3 software driver is to interface with the graphics chip, and where the first
 4 encrypted routine is an encrypted version of an encryption routine;
 5 decrypting, at the graphics chip, the first encrypted routine to generate a plaintext routine,
 6 wherein the plaintext routine is a version of the encryption routine; and
 7 storing the plaintext routine in memory in a location known to the software driver.

1 18. The method of Claim 17, further including the step of sending a decryption code to the
 2 graphics chip, where the decryption code is to be used by the graphics chip to decrypt the
 3 first encrypted routine.

1 19. The method of Claim 17, wherein the step of decrypting is performed by a 3D pipe of the
 2 graphics chip.

1 20. The method of Claim 17, wherein the step of decrypting is performed by a IDCT
 2 component of the graphics chip.

1 21. The method of Claim 17, wherein the step of decrypting is performed by dedicated
 2 encryption hardware of the graphics chip.

1 22. The method as in Claim 17, wherein the step of decrypting is performed through a series
 2 of components coupled within the graphics chip.

1 23. The method of Claim 17, further including the step of removing the plaintext routine.

- 1 24. The method of Claim 17, further including the steps of:
 2 encrypting, at the graphics chip, the plaintext routine to generate a second encrypted
 3 routine; and
 4 storing the second encrypted routine in memory in a location known to the software
 5 driver.
- 1 25. The method of Claim 24, further including the step of sending a encryption code to the
 2 graphics chip, where the encryption code is to be used by the graphics chip to encrypt the
 3 plaintext routine.
- 1 26. The method of Claim 24, wherein the second encrypted routine is a modified version of
 2 the first encrypted routine.
- 1 27. The method of Claim 17, further including the step of selecting the first encrypted routine
 2 from a plurality of different encrypted routines, wherein the plurality of different
 3 encrypted routines are functionally equivalent.
- 1 28. The method of Claim 17, wherein the step of decrypting includes using a map as a
 2 decryption key.
- 1 29. The method of Claim 28, wherein the map includes a texture map.
- 1 30. The method of Claim 17, wherein the step of providing includes storing the plaintext
 2 routine in a location in memory accessible by the software driver, and where the location
 3 in memory is known to the software driver.

31. A system comprising:
a processor;
memory operably coupled to said processor;
a peripheral device, said peripheral device to decrypt a first encrypted routine and
generate a plaintext routine;
a software driver, wherein said software driver is to interface with said peripheral device,
said software driver including a program of instructions capable of being stored in
said memory and executed by said processor, said program of instructions to
manipulate said processor to:
send the first encrypted routine of said software driver to said peripheral device;
and
execute the plaintext routine.

32. The system of Claim 31, wherein the peripheral device includes a hardware component to
encrypt the plaintext routine to generate a second encrypted routine, and where the
second encrypted routine is a modified version of the first encrypted routine.

33. The system of Claim 31, wherein the peripheral device includes a hardware component to
decrypt the first encrypted routine to generate the plaintext routine.

34. The system of Claim 33, wherein the peripheral device is a graphics chip.

35. The system of Claim 33, wherein the hardware component is a 3D pipe.

36. The system of Claim 33, wherein the hardware component is a IDCT component.

37. The system of Claim 33, wherein the hardware component is a dedicated hardware
component.

1 38. The system of Claim 31, wherein said program of instructions further include instructions
2 to manipulate said processor to send a decryption code to said peripheral device, where
3 the decryption code is to be used by said peripheral device to decrypt the first encrypted
4 routine.

1 39. The system of Claim 31, wherein said program of instructions further include instructions
2 to manipulate said processor to send an encryption code to said peripheral device, where
3 the encryption code is to be used by said peripheral device to encrypt the plaintext
4 routine.

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- 1 40. A system comprising:
2 a first interface to receive a first encrypted routine of a software driver;
3 a first hardware component to decrypt the first encrypted routine received by said
4 interface and generate a plaintext routine; and
5 a second interface to output the plaintext routine for use by said software driver.
- 1 41. The system as in Claim 40, wherein said first interface and said second interface are
2 implemented using a same interface.
- 1 42. The system of Claim 40, further including a second hardware component to:
2 encrypt the plaintext routine to generate a second encrypted routine, wherein the second
3 encrypted routine is a modified version of the first encrypted routine; and
4 provide the second encrypted routine to said interface.
- 1 43. The system of Claim 42, wherein the first hardware component and the second component
2 are implemented using a same hardware component.
- 1 44. The system of Claim 40, wherein the hardware component is a 3D pipe.
- 1 45. The system of Claim 40, wherein the hardware component is a IDCT component.
- 1 46. The system of Claim 40, wherein the hardware component is a dedicated hardware
2 component.

- 1 47. A method comprising the steps of:
2 sending a first encrypted routine of a first software driver to a peripheral device, wherein
3 the software driver is to interface with the peripheral device;
4 decrypting, at the peripheral device, the first encrypted routine to generate a plaintext
5 routine; and
6 providing the plaintext routine to a second software driver.
- 1 48. The method of Claim 47, wherein the second software driver includes a lower level of
2 protection from unauthorized access than the first software driver.

47. A method comprising the steps of:
sending a first encrypted routine of a first software driver to a peripheral device, wherein
the software driver is to interface with the peripheral device;
decrypting, at the peripheral device, the first encrypted routine to generate a plaintext
routine; and
providing the plaintext routine to a second software driver.

48. The method of Claim 47, wherein the second software driver includes a lower level of
protection from unauthorized access than the first software driver.

- 1 49. A method comprising the steps of:
2 sending a first encrypted data associated with an application to a peripheral device,
3 wherein the application is to interface with the peripheral device;
4 decrypting, at the peripheral device, the first encrypted sensitive to generate a plaintext
5 data; and
6 providing the plaintext data to the application.
- 1 50. The method of Claim 49, wherein the first encrypted data includes an encrypted software
2 routine.
- 1 51. The method of Claim 49, wherein the first encrypted data includes an encrypted version
2 of one of: a private encryption key, a private decryption key, a chip ID, and a device ID.
- 1 52. The method of Claim 49, wherein the application includes a software driver.
- 1 53. The method of Claim 49, wherein the peripheral device includes a graphics chip.
- 1 54. The method of Claim 49, further including the step of encrypting, at the peripheral
2 device, the plaintext data to generate a second encrypted data, wherein the second
3 encrypted data is a version of the first encrypted data.

- 1 55. A method comprising the steps of:
 2 sending a first encrypted data to a graphics chip;
 3 decrypting, at the graphics chip, the first encrypted data to generate a plaintext data; and
 4 providing the plaintext data to an application, wherein the application is to interface with
 5 the graphic chip.
- 1 56. The method of Claim 55, wherein the first encrypted data includes an encrypted software
 2 routine.
- 1 57. The method of Claim 55, wherein the first encrypted sensitive data includes an encrypted
 version of one of: a private encryption key, a private decryption key, a chip ID, and a
 device ID.
- 1 58. The method of Claim 55, wherein the application includes a software driver.
- 1 59. The method of Claim 55, wherein the step of decryption is performed by a 3D pipe of the
 graphics chip.
- 1 60. The method of Claim 55, wherein the step of decryption is performed by a IDCT
 2 component of the graphics chip.
- 1 61. The method of Claim 55, wherein the step of decryption is performed by a dedicated
 2 hardware component of the graphics chip.

- 1 62. The method of Claim 55, further including the step of encrypting, at the peripheral
2 device, the plaintext data to generate a second encrypted data, wherein the second
3 encrypted data is a version of the first encrypted data.

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